LISTING OF CLAIMS

1. (currently amended) A fluidized bed reactor having a reactor wall coating, wherein said reactor wall coating is formed in situ on a reactor wall during polymerization of olefin monomer, said reactor wall coating having a thickness of at least 100 μm and a molecular weight distribution comprising a major peak having:

(a) an Mw/Mn ratio of less than 10;

(b) an Mz/Mw ratio of less than 7, and

(c) a maximum value of d(wt%)/d(log MW) at less than 25,000 daltons in a plot of d(wt%)/d(log MW), where MW is the molecular weight in daltons, wherein said wall coating is formed in situ on a reactor wall during polymerization of olefin monomer in the presence of bimetallic catalyst and an aluminum alkyl cocatalyst to form a reactor wall coating on the interior reactor wall.

2. (original) The reactor wall coating of claim 1, wherein the thickness is at least 125 μm.

3. (original) The reactor wall coating of claim 1, wherein the thickness is at least 150 μm.

4. (original) The reactor wall coating of claim 1, wherein the Mw/Mn ratio is less than 4.

5. (original) The reactor wall coating of claim 1, wherein the Mz/Mw ratio is less than 4.

6. (original) The reactor wall coating of claim 1, wherein the maximum value of d(wt%)/d(log MW) is at less than 15,000 daltons.

7. (original) The reactor wall coating of claim 1, wherein the maximum value of d(wt%)/d(log MW) is at less than 13,000 daltons.

8. (original) The reactor wall coating of claim 1, wherein the major peak has an Mn value of less than 7000.

9. (original) The reactor wall coating of claim 1, wherein the coating has an initial voltage potential V_0 of at least 400 V, where V_0 is the absolute value of the voltage potential measured immediately after application of a charging voltage potential of 9 kV for a period of 20 ms.

10. (original) The reactor wall coating of claim 9, wherein V_0 is at least 600 V.

11. (original) The reactor wall coating of claim 9, wherein V_0 is at least 800 V.

12. (original) The reactor wall coating of claim 9, wherein V_0 is at least 1000 V.

13. (original) The reactor wall coating of claim 9, wherein the coating has a voltage retention value V_{60} of at least $0.8V_0$, where V_{60} is the absolute value of the voltage potential measured 60 s after application of the charging voltage potential.

14. (original) The reactor wall coating of claim 13, wherein V_{60} is at least $0.9V_0$.

15. (original) The reactor wall coating of claim 9, wherein the coating has a voltage retention value V_{120} of at least $0.75V_0$, where V_{120} is the absolute value of the voltage potential measured 120 s after application of the charging voltage potential.

16. (original) The reactor wall coating of claim 15, wherein V_{120} is at least $0.8V_0$.

17. (original) The reactor wall coating of claim 15, wherein V_{120} is at least $0.9V_0$.

18. (original) The reactor wall coating of claim 9, wherein the coating has a voltage retention value V_{300} of at least $0.75V_0$, where V_{300} is the absolute value of the voltage potential measured 300 s after application of the charging voltage potential.

19. (original) The reactor wall coating of claim 18, wherein V_{300} is at least $0.8V_0$.

20. (original) The reactor wall coating of claim 1, wherein the major peak contains at least 50 wt% of the total weight of the molecular weight distribution.

21. (original) The reactor wall coating of claim 1, wherein the major peak contains at least 60 wt% of the total weight of the molecular weight distribution.

22. (original) The reactor wall coating of claim 1, wherein the major peak contains at least 70 wt% of the total weight of the molecular weight distribution.

23 - 42. (cancelled)

43. (cancelled)

44. (currently amended) A fluidized bed reactor having a reactor wall coating, wherein said reactor wall coating is formed in situ on a reactor wall during polymerization of olefin monomer, said reactor wall coating having a thickness of at least 100 μm and a molecular weight distribution comprising a major peak having:

(a) an Mw/Mn ratio of less than 10;

(b) an Mz/Mw ratio of less than 7, and

(c) a maximum value of d(wt%)/d(log MW) at less than 25,000 daltons in a plot of d(wt%)/d(log MW), where MW is the molecular weight in daltons ~~The reactor wall coating of Claim 1~~,

wherein said olefin monomer comprises at least one monomer selected from the group consisting of ethylene, propylene, C_4-C_{20} alpha olefins, and mixtures thereof.

45. (currently amended) A fluidized bed reactor having a reactor wall coating, wherein said reactor wall coating is formed in situ on a reactor wall during polymerization of olefin monomer, said reactor wall coating having a thickness of at least 100 μm and a molecular weight distribution comprising a major peak having:

(a) an Mw/Mn ratio of less than 10;

(b) an Mz/Mw ratio of less than 7, and

(c) a maximum value of d(wt%)/d(log MW) at less than 25,000 daltons in a plot of d(wt%)/d(log MW), where MW is the molecular weight in daltons

~~The reactor wall coating of Claim 1,~~

wherein said coating comprises aluminum and zirconium.